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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,532	12/12/2001	Roberto Villa	9623 V/vmf/as	4029
466 7590 02/26/2007 YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER SHEIKH, HUMERA N	
			ART UNIT	PAPER NUMBER
			1615	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/26/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/009,532

Applicant(s)

VILLA ET AL.

Examiner

Humera N. Sheikh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 25-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Status of the Application**

In view of the Appeal Brief filed 11/13/06, PROSECUTION IS HEREBY REOPENED.

Claims 25-39 are pending in this action. Claims 25-39 are rejected.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 25-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauer *et al.* (U.S. Patent No. 5,342,625).**

The instant invention is drawn to a controlled release composition, comprising: a hydrophilic first matrix comprising a lipophilic phase and an amphiphilic phase, wherein said

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lipophilic phase and said amphiphilic phase are in a second matrix together, and said second matrix is dispersed throughout the hydrophilic first matrix, wherein said lipophilic phase comprises lipophilic compounds and an active ingredient at least partially incorporated in said lipophilic phase and wherein said amphiphilic phase comprises an active ingredient at least partially incorporated in said amphiphilic phase.

**Hauer *et al.* ('625)** teach pharmaceutical compositions comprising cyclosporins as the active ingredient in microemulsion pre-concentrate and microemulsion form (see Abstract); (col. 1, lines 5-20). In addition to the cyclosporine active ingredient, the microemulsion pre-concentrate compositions will comprise: (1) a hydrophilic phase, (2) a lipophilic phase; and (3) a surfactant. The cyclosporine is carried in the lipophilic phase. Suitably both the hydrophilic and lipophilic phases will serve as carrier medium (col. 6, lines 35-53).

Especially preferred in accordance with the present invention are compositions as defined under (A) in which the hydrophilic phase comprises components, particularly TRANSCUTOL, COLYCOFUROL and/or 1,2-propylene glycol (col. 7, line 19 – col. 8, line 42). TRANSCUTOL will generally be present in an amount of from about 1 to about 90% by weight (col. 17, lines 4-13).

Compositions defined under (A) additionally comprise a lipophilic phase (2) (col. 8, lines 56-57). Suitable components for use as lipophilic phase components include fatty acid triglycerides, neutral oils, e.g., neutral plant oils, in particular coconut oils commercially available under the trade name MIGLYOL (col. 8, line 58 – col. 9, line 20).

The compositions further comprise a surfactant component, which may comprise hydrophilic or lipophilic surfactants or mixtures thereof. Suitable surfactants disclosed include

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reaction products of natural or hydrogenated vegetable oils and ethylene glycol, i.e., polyoxyethylene glycolated natural or hydrogenated vegetable oils. Also disclosed are polyoxyethylene-sorbitan-fatty acid esters (col. 9, line 40 – col. 10, line 53).

Phospholipids, in particular lecithins are also suitable for use in the compositions of the invention (col. 10, lines 56-58).

Propylene glycol mono- and di-fatty acid esters such as propylene glycol dicaprylate and the like are also disclosed (col. 10, lines 60-65).

Celluloses and cellulose derivatives are disclosed at col. 12, line 65 – col. 13, line 12 and include hydroxyalkyl celluloses.

Additional suitable components taught include solid hydrocarbons, and vegetable and synthetic waxes provided in amounts of up to about 80% by weight (col. 23, lines 19-38).

The compositions may be employed orally in unit dosage forms, for example hard or soft gelatin capsules (col. 16, lines 25-41).

The compositions can comprise one or more carriers, or diluents, thickening agents, emulsifying agents and so forth (col. 22, lines 37-41).

Given the teachings of Hauer *et al.* discussed above, the instant invention, when taken as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

**Claims 25-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cottens *et al.* (WO 96/13273).**

The instant invention is drawn to a controlled release composition, comprising: a hydrophilic first matrix comprising a lipophilic phase and an amphiphilic phase, wherein said lipophilic phase and said amphiphilic phase are in a second matrix together, and said second matrix is dispersed throughout the hydrophilic first matrix, wherein said lipophilic phase comprises lipophilic compounds and an active ingredient at least partially incorporated in said lipophilic phase and wherein said amphiphilic phase comprises an active ingredient at least partially incorporated in said amphiphilic phase.

**Cottens *et al.* ('273)** teach pharmaceutical compositions comprising a microemulsion pre-concentrate comprising a difficultly soluble active agent and a carrier medium comprising: (1) a hydrophilic phase which comprises dimethylisobutyl alcohol and/or a lower alkyl alkanolic ester; (2) a lipophilic phase and (3) a surfactant. The active agent may be cyclosporine or a macrolide (see Abstract); (p. 2, lines 13-18); (p. 3, lines 22-24).

The composition may be in the form of a microemulsion, which additionally contains an aqueous phase, preferably water (p. 2, lines 20-23).

The lipophilic phase may comprise 5 to 85% by weight of the carrier medium (p. 3, lines 10-12). The hydrophilic phase may comprise 5 to 50% by weight of the carrier medium (p. 3, lines 17-18). The surfactant phase may comprise 5 to 80% by weight of the carrier medium (p. 3, lines 13-15).

The hydrophilic phase may also comprise a co-component selected from Transcutol. The hydrophilic co-components may also include ethanol (p. 6, lines 22-26).

The compositions can be in gelatin, encapsulated forms (p. 7, line 1), (p. 17, lines 25-26).

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Preferred lipophilic phase components are medium chain fatty acid triglycerides, mixed mono-, di-, tri-glycerides and transesterified ethoxylated vegetable oils (p. 7, line 18 – p. 10, line 11).

Examples of suitable surfactants are listed at page 10, line 13 – p. 12, line 15. Phospholipids, in particular lecithins, are also disclosed (p. 12, lines 6-7).

Given the teachings of Cottens *et al.* discussed above, the instant invention, when taken as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

### ***Conclusion***

- No claims are allowed at this time.

### **Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604. The examiner can normally be reached on Monday through Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Humera N. Sheikh

Primary Examiner

Art Unit 1615

February 20, 2007

  
HUMERA N SHEIKH  
PRIMARY EXAMINER  
TC-1600

*hns*